REMARKS/ARGUMENTS

The Examiner is thanked for the Office Action mailed December 28, 2007. The status of the application is as follows:

- Claims 1-20 are pending;
- Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trotel (U.S. 5,002,060) in view of Yu (US 6,094,473) and in further view of Brunnett (US 4,052,620); and
- Claims 7-20 are objected to as being dependent upon a rejected base claim.

The rejections are discussed below.

The Rejection of Claims 1-6 under 35 U.S.C. 103(a)

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trotel (U.S. 5,002,060) in view of Yu (6,094,473) and in further view of Brunnett (4,052,620). This rejection should be withdrawn because the combination of Trotel, Yu, and Brunnett does not teach or suggest all the limitations of the subject claims and, therefore, fails to establish a *prima facie* case of obvious with respect to the subject claims.

> To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, (CCPA 1974). "MPEP §2143.03.

Independent **claim 1** is directed towards a CT scanner that includes, *inter alia*, means for generating an analog data signal that varies with an intensity of radiation traversing the examination region, means for converting the analog data signal to a digital data signal including aperiodic pulses varying in frequency with the intensity of the radiation traversing the examination region as the radiation source rotates about the examination region, ***a means for producing a time signal indicative of data intervals, and means for determining average radiation intensity in each data interval by counting the pulses of the digital data signal starting with a digital data signal pulse occurring in a preceding data interval and continuing to a digital data signal pulse occurring in a succeeding data interval.*** Independent **claim 6** is

directed towards a method of performing the above acts. The combination of Trotel, Yu, and Brunnett does not teach or suggest all of the above-noted claim aspects.

The Office concedes that Trotel does not teach or suggest all of the aforementioned claimed aspects. In an attempt to make up for the conceded deficiencies, the Office asserts that Yu teaches a means for producing the claimed time signal and that Brunnett teaches the claimed means for determining average radiation intensity. The Office further asserts that it would have been obvious to one of ordinary skill in the relevant art at the time of the invention to combine Trotel, Yu, and Brunnett to teach claim 1. Applicant respectfully traverses these assertions.

In particular, the Office asserts that column 6, lines 1-8, of Yu teaches a means (namely, the voltage controlled oscillator 46) for producing a time signal indicative of data intervals as recited in claim 1. However, this section of Yu does not teach the subject claim aspect. Yu is directed towards a voltage-to-frequency converter (the voltage controlled oscillator 46) that converts an electrical voltage signal to a frequency signal. More particularly, Yu discloses a digital frequency modulated output signal circuit 40 that includes an x-ray sensor 30, a current-to-voltage converter 44, and the voltage controlled oscillator 46. (See column 5, lines 38-47). The current-to-voltage converter 44 converts an electric current output signal from the sensor 30 to an electric voltage output signal having a voltage level proportional to the current level in the current output signal. (See column 5, lines 52-57). The voltage controlled oscillator 46 receives the electric voltage output from the current-to-voltage converter 44 and generates a digital frequency modulated output signal based thereon. (See column 5, lines 57-63).

As disclosed at column 6, lines 1-8, the x-ray sensor 30 generates an electric current output signal in a range of 1-10 nano-Amperes and the voltage controlled oscillator 46 has an output range from 0 MHz to 8 MHz, and, thus, the voltage controlled oscillator 46 produces a digital frequency modulated output signal indicative of the level of the electrical current in the range of 0 MHz to 8 MHz. Hence, the referenced section of Yu teaches that the voltage controlled oscillator 46 is a ***voltage-to-frequency converter that converts an electrical voltage (which is indicative of a level of an electrical current), into a frequency signal***; the oscillator 46 produces a frequency (not time) signal indicative of a level of an electrical current (not data intervals). Yu is silent regarding a means for producing a time signal indicative of data intervals as recited in claim 1.

The Office further asserts that column 6, lines 18-24, and column 7, lines 1-22, of Brunnett teach a means for determining average radiation intensity from pulses that are counted during primary time period data intervals. However, this does not teach counting pulses of a digital data signal starting with a digital data signal pulse occurring in a preceding data interval and continuing to a digital data signal pulse occurring in a succeeding data interval, as recited in claim 1. More particularly, in Brunnett the data signal processor counts the pulses in a primary time period. Then, the data signal processor initiates a secondary time period coincident with the first data pulse occurring within the primary time period and terminates the secondary time period coincident with the last pulse occurring within the primary time period. (See column 6, lines 65-68; column 7, line 1). Brunnett discloses that the average intensity of the secondary time period is attributed to the entire primary time period. (See column 6, lines 18-19). Hence the referenced sections of Brunnett teach that ***the average intensity is calculated from measurements taken only during the primary time period***, and does not teach or suggest counting pulses from preceding and succeeding time periods as required in claim 1. Brunnett is silent regarding a means for determining average radiation intensity as enumerated in claim 1.

In view of the above, it is readily apparent that the combination of Trotel, Yu, and Brunnett do not teach or suggest the subject claim aspects and, therefore, the rejection of claims 1 and 6 should be withdrawn.

Claims 2-5 depend from claim 1 and are allowable at least by virtue of their dependencies.

Allowed Claims

The Examiner is thanked for indicating that claims 7-20 would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims. Applicant reserves the right to rewrite these claims as indicated by the Examiner at a later time if desired.

Conclusion

In view of the foregoing, it is submitted that the claims distinguish patentably and non-obviously over the prior art of record. An early indication of allowability is earnestly solicited.

Respectfully submitted,

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